## APPENDIX TO AMENDMENT AFTER FINAL

- 1. (Thrice Amended) For use in connection with a remote method invocation system, a stub [code] retrieval and loading subsystem for controlling the retrieval and loading of [stub code for] a stub of a remote method into an execution environment to facilitate invocation of the remote method by a program executing in said execution environment, the stub [code] retrieval subsystem comprising:
- A. a stub retriever configured to initiate a retrieval of said stub [code] from a server associated with processing of said remote method, said stub [code] used to facilitate remote invocation of said remote method; and
- B. a stub [code] loader configured to, when said stub is received by said stub [code] retriever from said server, [loading] load said stub [code] into said execution environment, thereby to make the stub available for use in said remote invocation of said remote method.
- 2. (Thrice Amended) A stub [code] retrieval and loading subsystem as defined in claim 1 further including a remote method reference detector configured to detect whether a remote method reference has been received in said execution environment, the stub [code] retriever being further configured to initiate retrieval of said stub [code] when the remote method reference detector detects that a remote method reference has been received in said execution environment.

- 3. (Thrice Amended) A stub [code] retrieval and loading subsystem as defined in claim 1 further including a remote method invocation control configured to control invocation of said remote method, said stub retriever being further configured to initiate retrieval of said stub code when the remote method is invoked.
- 4. (Thrice Amended) A stub [code] retrieval and loading subsystem as defined in claim 1, the remote method invocation system further including the server, the server being configured to process said remote method in response to a processing request therefore, the server further being configured to provide said stub [code] in response to a retrieval request from said stub [code] retriever.
- 5. (Thrice Amended) A stub [code] retrieval and loading subsystem as defined in claim 4 in which server is configured to provide a separate address space for processing said remote method from an address space provided by said execution environment.
- 6. (Twice Amended) A stub [code] retrieval and loading subsystem as defined in claim 5 in which the address space provided by said server and the address space provided by said execution environment are provided by separate computers.
- 7. (Thrice Amended) A stub [code] retrieval and loading subsystem as defined in claim 4, further comprising a remote server identifier configured to provide a server identification for identifying said server.

- 8. (Thrice Amended) A stub [code] retrieval and loading subsystem as defined in claim 7 further including a remote method reference detector configured to detect whether a remote method reference has been received in said execution environment, the remote method reference including a remote method server identifier configured to use the remote method server identifier as the server identification.
- 9. (Thrice Amended) A stub [code] retrieval and loading subsystem as defined in claim 7 further including a remote method invocation control configured to provide a remote method invocation identification for controlling invocation of said remote method, the remote method invocation providing a remote method server identifier, the remote server identifier using the remote method server identifier as the server identification.
- 10. (Thrice Amended) A stub [code] retrieval and loading subsystem as defined in claim 7, the remote method invocation system further including a nameserver configured to provide a said server identification, said remote server identifier initiating communication with said nameserver to obtain the server identification for said remote method.
- 11. (Thrice Amended) [For use in connection with a remote method invocation method, a] A stub retrieval and loading method for controlling the retrieval and loading of [stub code for] a stub of a remote method into an execution environment to facilitate

invocation of the remote method by a program executing in said execution environment, the stub [code] retrieval method comprising the steps of:

- A. initiating a retrieval of said stub [code] from a server associated with processing of said remote method, said stub [code] used to facilitate remote invocation of said remote method; and
- B. when said stub is received <u>from said server</u>, loading said stub into said execution environment, thereby to make the stub [code] available for use in said remote invocation of said remote method.
- 12. (Twice Amended) A stub [code] retrieval and loading method as defined in claim
  11 further including the step of detecting whether a remote method reference has been
  received in said execution environment, and wherein the initiating step includes the step
  of initiating retrieval of said stub [code] when a remote method reference has been
  received in said execution environment.
- 13. (Twice Amended) A stub [code] retrieval and loading method as defined in claim 11 further including the step of controlling invocation of said remote method, and wherein the initiating step includes the step of initiating retrieval of said stub [code] when the remote method is invoked.
- 14. (Thrice Amended) A stub [code] retrieval and loading method as defined in claim11[, the stub code retrieval and loading method] further including the steps of enablingthe server to process said remote method in response to a processing request

therefore, and enabling the server to provide said stub [code] in response to a retrieval request from said stub [code] retriever.

- 15. (Twice Amended) A stub [code] retrieval and loading method as defined in claim
  14 in which said server provides a separate address space for processing said remote
  method from an address space provided by said execution environment.
- 16. (Twice Amended) A stub [code] retrieval and loading method as defined in claim
  15 in which the address space provided by said server and the address space provided
  by said execution environment are provided by separate computers.
- 17. (Twice Amended) A stub [code] retrieval and loading method as defined in claim 14, further including the step of providing a server identification for identifying said server.
- 18. (Twice Amended) A stub [code] retrieval and loading method as defined in claim 17 further including the step of detecting whether a remote method reference has been received in said execution environment, the remote method reference including a remote method server identifier, the remote method server identifier being used as the server identification when detecting whether the remote method reference has been received.

- 19. (Twice Amended) A stub [code] retrieval and loading method as defined in claim 17 further including the step of providing a remote method invocation identification for controlling invocation of said remote method, the remote method invocation providing a remote method server identifier, the remote method server identifier being used as the server identification when controlling invocation of said remote method.
- 20. (Twice Amended) A stub [code] retrieval and loading subsystem as defined in claim 17, [the remote method invocation system] further including a nameserver for providing [a] said server identification, said remote server identifier initiating communication with said nameserver to obtain the server identification for said remote method.
- 21. (Thrice Amended) For use in connection with a remote method invocation method, a stub [code] retrieval and loading computer program product for controlling a computer to, in turn, control the retrieval and loading of [stub code for] a stub of a remote method into an execution environment to facilitate invocation of the remote method by a program executing in said execution environment, the stub [code] retrieval computer program product comprising a computer-readable medium having encoded thereon:
- A. stub retriever code configured to enable said computer to initiate a retrieval of said stub [code] from a server associated with processing of said remote method, said stub [code] used to facilitate remote invocation of said remote method; and

- B. stub loader code configured to enable said computer to, when said stub is received from said server, load said stub [code] into said execution environment, thereby to make the stub [code] available for use in said remote invocation of said remote method.
- 22. (Thrice Amended) A stub [code] retrieval and loading computer program product as defined in claim 21 further including remote method reference detector code configured to enable said computer to detect whether a remote method reference has been received in said execution environment, the stub retriever code being configured to enable said computer to initiate retrieval of said stub when the remote method reference detector code <a href="enables">enables</a> [enables] said computer to detect that a remote method reference has been received in said execution environment.
- 23. (Thrice Amended) A stub [code] retrieval and loading computer program product as defined in claim 21 further including remote method invocation control code configured to enable said computer to control invocation of said remote method, said stub retriever code being configured to enable said computer to initiate retrieval of said stub [code] when the remote method is invoked.
- 24. (Thrice Amended) A stub [code] retrieval and loading computer program product as defined in claim 21, the remote method invocation system further including the server, the server being configured for processing said remote method in response to a processing request therefore, the server further configured to provide said stub [code] in response to a retrieval request from said computer.

- 25. (Thrice Amended) A stub [code] retrieval and loading computer program product as defined in claim 24 in which said server is configured to provide a separate address space for processing said remote method from an address space provided by said execution environment.
- 26. (Twice Amended) A stub [code] retrieval and loading computer program product as defined in claim 25 in which the address space provided by said server and the address space provided by said execution environment are provided by separate computers.
- 27. (Thrice Amended) A stub [code] retrieval and loading computer program product as defined in claim 24, further comprising remote server identifier code configured to enable said computer to provide a server identification for identifying said server.
- 28. (Twice Amended) A stub [code] retrieval and loading computer program product as defined in claim 27 further including remote method reference detector code for enabling said computer to detect whether a remote method reference has been received in said execution environment, the remote method reference including a remote method server identifier, the remote server identifier code enabling said computer to use the remote method server identifier as the server identification.

- 29. (Thrice Amended) A stub [code] retrieval and loading computer program product as defined in claim 27 further including remote method invocation control code configured to enable said computer to provide a remote method invocation identification for controlling invocation of said remote method, the remote method invocation providing a remote method server identifier, the remote server identifier code being configured to enable said computer to use the remote method server identifier as the server identification.
- 30. (Thrice Amended) A stub [code] retrieval and loading computer program product as defined in claim 27, the remote method invocation system further including a nameserver configured to provide a said server identification, said remote server identifier code being configured to enable said computer to initiate communication with said nameserver to obtain the server identification for said remote method.
- 31. (Thrice Amended) For use in connection with a remote method invocation system, a stub retrieval and loading subsystem for controlling the retrieval and loading of [stub code for] a stub of a remote method into an execution environment to facilitate invocation of the remote method by a program executing in said execution environment, the stub retrieval subsystem comprising:
  - A. a computer; and
- B. a control arrangement configured to control said computer, said control arrangement comprising:

- i. a stub [code] retrieval module configured to control said computer to initiate a retrieval of said stub [code] from a server associated with processing of said remote method, said stub used to facilitate remote invocation of said remote method; and
- ii. a stub loader module configured to control said computer to, when said stub is received <u>from said server</u> in response to said stub [code] retrieval module, load said stub [code] into said execution environment, thereby to make the stub [code] available for use in said remote invocation of said remote method.
- 32. (Thrice Amended) A control arrangement for use in connection with a computer to control the retrieval and loading of [stub code for] a stub of a remote method into an execution environment to facilitate invocation of the remote method by a program executing in said execution environment, said control arrangement comprising:
- i. a stub [code] retrieval module configured to control said computer to initiate a retrieval of said stub [code] from a server associated with processing of said remote method, said stub [code] used to facilitate remote invocation of said remote method; and
- ii. a stub loader module configured to control said computer to, when said stub is received <u>from said server</u> in response to said stub [code] retrieval module, load said stub [code] into said execution environment, thereby to make the stub [code] available for use in said remote invocation of said remote method.

- 33. (Thrice Amended) A system for distributing code stored on a computer readable medium and executable by a computer, the code including a plurality of modules each configured to control the computer to facilitate the retrieval and loading of [stub code for] a stub of a remote method into an execution environment to facilitate invocation of the remote method by a program executing in said execution environment, said system comprising:
- i. a stub [code] retrieval module configured to control said computer to initiate a retrieval of said stub [code] from a server associated with processing of said remote method, said stub used to facilitate remote invocation of said remote method;
- ii. a stub [code] loader module configured to control said computer to, when said stub [code] is received <u>from said server</u> in response to said stub [code] retrieval module, load said stub [code] into said execution environment, thereby to make the stub [code] available for use in said remote invocation of said remote method.